

CLEAN CLAIMS

1. A method for removing calcium from water containing a high concentration of calcium bicarbonate, comprising the steps of:

5 adding calcium hydroxide to waste water containing a high concentration of calcium in a form of calcium bicarbonate; and removing the calcium by fixing it to calcium carbonate.

2. A method for removing calcium from water containing a high concentration of calcium bicarbonate claimed according to claim 1, in which the quantity of calcium hydroxide to be added ranges in 75 to 125% of the equivalent weight to calcium.

3. A method for removing calcium from water containing a high concentration of calcium bicarbonate claimed according to claim 1, in which the quantity of calcium hydroxide to be added ranges in 90 to 110% of the equivalent weight to calcium.

4. A method for removing calcium from water containing a high concentration of calcium bicarbonate claimed according to claim 1, further comprising the step of defluorination by adding calcium carbonate to primary waste water containing HF.

5. A method for removing calcium from water containing a high concentration of calcium bicarbonate claimed according to claim 1, in which the water contains said calcium bicarbonate of 200ppm or more.

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6. A method for removing calcium from water containing a high concentration of calcium bicarbonate claimed according to claim 1 in which said adding step comprises that the calcium hydroxide added causes the pH of the waste water to range from 8.5 to 10.5.

7. A method for removing calcium from water containing a high concentration of calcium bicarbonate claimed according to claim 2, further comprising the step of defluorination by adding calcium carbonate to primary waste water containing HF.

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8. A method for removing calcium from water containing a high concentration of calcium bicarbonate claimed according to claim 3, further comprising the step of defluorination by adding calcium carbonate to primary waste water containing HF.

9. A method for removing calcium from water containing a high concentration of calcium bicarbonate claimed according to claim 2, in which the water contains said calcium bicarbonate of 200ppm or more.

10. A method for removing calcium from water containing a high concentration of calcium bicarbonate claimed according to claim 3, in which the water contains said calcium bicarbonate of 200ppm or more.

11. A method for removing calcium from water containing a high concentration of calcium bicarbonate claimed according to

claim 4, in which the water contains said calcium bicarbonate of 200ppm or more.

12. A method for removing calcium from water containing a high concentration of calcium bicarbonate claimed according to claim 7, in which the water contains said calcium bicarbonate of 200ppm or more.

13. A method for removing calcium from water containing a high concentration of calcium bicarbonate claimed according to claim 8, in which the water contains said calcium bicarbonate of 200ppm or more.

14. A method for removing calcium from water containing a high concentration of calcium bicarbonate claimed according to claim 2 in which said adding step comprises that the calcium hydroxide added causes the pH of the waste water to range from 8.5 to 10.5.

15. A method for removing calcium from water containing a high concentration of calcium bicarbonate claimed according to claim 3 in which said adding step comprises that the calcium hydroxide added causes the pH of the waste water to range from 8.5 to 10.5.

16. A method for removing calcium from water containing a high concentration of calcium bicarbonate claimed according to claim 4 in which said adding step comprises that the calcium

hydroxide added causes the pH of the waste water to range from
5 8.5 to 10.5.

17. A method for removing calcium from water containing a
high concentration of calcium bicarbonate claimed according to
claim 5 in which said adding step comprises that the calcium
hydroxide added causes the pH of the waste water to range from
5 8.5 to 10.5.

18. A method for removing calcium from water containing a
high concentration of calcium bicarbonate claimed according to
claim 8 in which said adding step comprises that the calcium
hydroxide added causes the pH of the waste water to range from
5 8.5 to 10.5.

19. A method for removing calcium from water containing a
high concentration of calcium bicarbonate claimed according to
claim 11 in which said adding step comprises that the calcium
hydroxide added causes the pH of the waste water to range from
5 8.5 to 10.5.

20. A method for removing calcium from water containing a
high concentration of calcium bicarbonate claimed according to
claim 13 in which said adding step comprises that the calcium
hydroxide added causes the pH of the waste water to range from
5 8.5 to 10.5.